



Made in  
Germany

**MSTE SOLAR**



**MPT<sup>®</sup> Up**  
Charge Controller

**5 Years**  
Warranty

The MPT<sup>®</sup> Up are the ideal upward charge controllers for small modules (36 cells) with 12V solar voltage.

The MPT<sup>®</sup> Up are unique: in case of low irradiation conventional charge controller stop charging. But the MPT<sup>®</sup> Up are still working! The MPT<sup>®</sup> Up charge controllers change into pulsed operation, the solar power will be collected and pulsed to the battery. The energy yield is increased.

Quite remarkable is the very small self-consumption at night with less than 0,15mA!

| MPT <sup>®</sup> 170-36-Li            |  |
|---------------------------------------|--|
| Technical Data                        |  |
| DC-input (solar)                      |  |
| Maximum power                         | 170W   |
| Maximum voltage                       | 28V  |
| Recommended MPP-voltage               | 16,5V to 19V   |
| Maximum current                       | 11A  |
| DC-output (battery)                   |  |
| System voltage                        | 36V  |
| Voltage range                         | 10V to 50V   |
| Maximum charging current (nom. power) | 5,5A   |
| Types of battery                      | Lithium-Ion (adjustable)   |
| Final charging voltage Lithium-Ion    | 43,2V at delivery, factory modifiable  |
| Features                              |  |
| Display                               | 3 LED: red, green, yellow  |
| Protective Devices                    | reverse current, overvoltage (fine protection) , reverse battery (external), short-circuit (external), over-current (external) |
| Interface                             | BMS  |
| General Data                          |  |
| Efficiency                            | <96%   |
| Parallel Operation                    | up to 8 charge controllers   |
| Self-consumption                      | 0,005W/0,15mA  |
| Cooling method                        | passive cooling, without fan   |
| Degree of protection (IEC60529)       | IP30   |
| Temperature range (nom. power)        | -25°C to +50°C   |
| Dimensions (W/H/D)                    | 130mm/125mm/45mm   |
| Weight                                | 0,45kg   |
| Enclosure                             | aluminium, coated  |
| Recommended wire cross section        | 4mm <sup>2</sup>   |
| Certificate                           | conformity EMC89/336/EEC   |